

REMARKS/ARGUMENTS

Favorable reconsideration of this application as presently amended and in light of the following discussion is respectfully requested.

Claims 15, 16 and 28 are pending in the present application. Claims 15 and 16 are amended, and Claim 28 is added by the present amendment. Claims 1-14 and 17-27 were previously canceled.

Claim amendments and new claims find support in the specification as originally filed at least at page 51, lines 22-24. Thus, no new matter is added.

In the outstanding Office Action, the specification was objected to; Claim 16 was objected to because of an informality; Claim 15 was rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 5,047,863 to Kapan; and Claim 16 was indicated as allowable if rewritten in independent form.

Applicants thank the Examiner for the indication of allowable subject matter. Accordingly, new Claim 28 is added to recite the features of Claims 15 and 16 as suggested in the Office Action. Accordingly, it is respectfully submitted that new Claim 28 is allowable.

Further, regarding the objection to the title of the specification, the title is amended to more clearly indicate the claimed invention. Accordingly, it is respectfully requested the objection to the specification be withdrawn.

In addition, regarding the objection to Claim 16, Claim 16 is amended as suggested in the Office Action. Accordingly, it is respectfully requested the objection to the claims also be withdrawn.

Moreover, Applicants respectfully traverse the rejection of Claim 15 under 35 U.S.C. § 102(b) as anticipated by Kapan, with respect to amended Claim 15.

Claim 15 is amended to more clearly recite that an image processing circuit includes, in part, a real time processing unit and a main memory disposed outside of the real time processing unit. The main memory stores pixel data outputted from the real time processing unit and stores defective pixel addresses in a pixel array sequence order having an order of the pixel array in the image input device. Further, the real time processing unit includes a defective pixel compensation block that reads the defective pixel addresses stored in the main memory arranged in the pixel array sequence order and performs defective pixel compensation when a pixel address of a pixel data residing in the image matches the defective pixel address. In addition, the defective pixel compensation is performed in a pixel array sequence order.

By storing the addresses of defective pixels in the order in which they will be retrieved and processed, the defective pixel compensation block may advantageously perform defective pixel compensation more efficiently.¹

Applicants respectfully submit that Kapan fails to teach or suggest each feature of the invention of Claim 15. For example, Kapan fails to teach or suggest that defective pixel addresses are stored in a main memory in a pixel array sequence order having an order of the pixel array in the image input device. Kapan indicates that “identification of the defective sensor element is preferably accomplished at an initial manufacturing phase and then stored in non-volatile memory within a memory unit 36.”² Further, Kapan indicates that “sensor elements 3 and 7 of the first linear array 10 and sensor element 1 of the second linear array 12 are identified as being defective. The location of each of the defective sensor elements is then stored in the memory unit 36.”³ However, Kapan completely fails to teach or suggest any particular location or arrangement of storing the defect data in the memory. Thus, Kapan

¹ Specification at page 51, line 25, to page 52, line 5.

² Kapan at column 3, lines 8-11.

³ Kapan at column 3, lines 35-40.

also fails to achieve the advantages of storing the defective addresses in a useful order, as noted above. Accordingly, Applicants respectfully submit that Kapan fails to teach or suggest "a main memory [that] stores defective pixel addresses in a pixel array sequence order having an order of the pixel array in said image input device," and fails to teach or suggest a real time processing unit that includes a defective pixel compensation block that performs "defective pixel compensation in the pixel array sequence order," as recited in independent Claim 15.

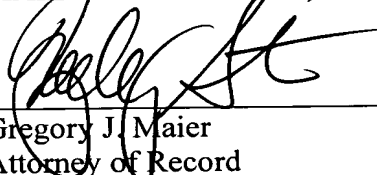
Accordingly, Applicants respectfully submit that independent Claim 15 and claims depending therefrom patentably define over Kapan.

Therefore, Applicants respectfully submit that independent Claims 15 and 28 and claims depending therefrom are allowable.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 06/04)

Zachary S. Stern
Registration No. 54,719

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